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**Title:** Preserving a layered history of the Western Wadden Sea: managing an underwater cultural heritage resource
**Date:** 2017-12-12
7.

Making underwater cultural heritage accessible to the public
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7.1 Introduction

While there are many reasons to aim for preservation in situ, there may be also downsides to this. As some threats may not be easily mitigated, which may compromise the significance of the site in the long run, costs for preservation may rise to unmanageable heights while little new knowledge about our past is collected. This may result in the decision to excavate a site. In addition, the use of certain protection methods may mean that the richness of underwater cultural resources becomes less visible to the general public. This may not encourage their interest or desire to engage. Is there a way to avoid this? Is it possible to preserve in situ and still address the public interest? Awareness raising and stimulating public engagement is important in the protection and management of the underwater cultural heritage. Although there may be many ways to organize this through different channels, I would like to mainly focus in this chapter on the role museums can play in this.

It has to be noted that not all wrecks undergo physical protection. As we have seen, some natural environments – such as in the Baltic Sea – are very stable and large-scale physical protection seems unnecessary. Some other environments, such as the highly dynamic, shallow Wadden Sea in the Netherlands and the Goodwin Sands in the UK, can be both protective of and hostile to underwater archaeological sites due to the dynamics of the environment. In these areas, much effort has to be made to physically stabilize a site.

However, it is always a matter of balancing the costs, the effects of protective measures, and the importance of the site. Cultural heritage sites are assessed on their archaeological, historical or aesthetic value. The prioritizing of sites may be pragmatic: not all sites can be actively protected and managed, simply because of insufficient money, time and human resources. When a wreck site does not seem worth protecting – physically or legally – a choice must be made to excavate it or leave it unattended.

The prioritization of sites is to some extent always subjective. Therefore, a measure of intersubjectivity may be ensured through the establishment of a decision-support system using management plans, monitoring protocols and research agendas. In this way, decisions can always be tracked and the process monitored.

Sometimes it is not possible to protect a site appropriately over a long period due to a lack of scientific or technical knowledge. Large twentieth-century iron shipwrecks are an example of this. What can be done to protect a 150 metre long iron hull protruding at least 10 metres from the seabed in a highly dynamic area?

Furthermore, since sites have different values, it is possible that those left untouched from a heritage management point of view may still be of interest to other stakeholders. Sports divers may like the aesthetics of a site and perhaps even the educational

Fig. 7.2 (A) Diving on the three WW1 British cruisers, the Aboukir, Cressy and Hogue in the North Sea. Photo: Cor Kuyvenhoven. (B) The three wrecks are also hotspots for biodiversity and, due to their popularity for sports diving, there is a lot of public involvement in their protection against looting and demolition for scrap metal. Figure: Foundation Duik de Noordzee Schoon.
value. The worth of a site may also lie in its memorial value. The choice can be made to allow these other values to prevail and take measures accordingly. Thus, a wreck site may not be covered but kept visible for visiting divers (Fig. 7.2 A + B). There may be all sorts of ways to reach out to other stakeholders while leaving wrecks in situ. Leaving sites uncared for and deselected from a cultural heritage perspective is a passive approach. Actively, we can mitigate and attempt to find middle ground: protecting parts of a wreck or specific historical and archaeological values, while keeping in mind the other (often non-scientific) values that stakeholders associate with the wreck site.

Participation in the process of underwater cultural heritage management by other stakeholders, such as sports divers, municipalities and other governmental agencies, may also be a way forward that balances the different values, and creates awareness and acceptance of in situ policy. This may eventually lead to the opening up of underwater sites for other groups, joint cooperation between different stakeholders to preserve sites in situ and the development of underwater museums or heritage trails.

In this chapter, we will discuss the relationship between museums and underwater cultural heritage, especially those sites that are preserved in situ. Section 7.2 introduces the museums and sites and the role of awareness-raising in the field of cultural heritage management. In Section 7.3, the various ways of bringing people to an archaeological site will be discussed, while in Section 7.4 several ways to bring in situ preserved sites to the public will be presented and discussed.

### 7.2 Museums and sites preserved in situ

In general, the preference for keeping archaeological sites on the seabed instead of excavating has consequences for the way traditional museums deal with underwater archaeological resources. Museums are key to informing and raising awareness among the general public. Their importance is related not only to the richness and exceptional conditions in which they present our underwater cultural heritage, but more specifically to the stories behind and beyond the objects. Examples of this range from a dress found in the BZN 17 wreck to entire Dutch warships that are rapidly disappearing in the Java Sea. Here we are dealing with completely different sites: one is a seventeenth-century wooden ship filled with exceptionally well-preserved items, while the other consists of three steel wrecks that have almost completely disappeared from the seabed. To tell their stories and to bring them to life for the public, archaeologists traditionally depend extensively on museums. This relationship benefits both sides: creating awareness is the best way to ensure the protection of underwater cultural heritage, while the people reached may also become regular museum visitors.

Museums such as the Mary Rose in Portsmouth (UK) and the Vasa in Stockholm (Sweden) have been highly successful in spreading awareness among the public. The Vasa is, with at least 750,000 visitors annually, the most visited museum in Scandinavia (Fig. 7.3). These museums are, however, built on material and information gathered during excavations. The archaeological excavations have provided context to the objects, and the ships and their contents are preserved ex situ.

How can we accomplish this when the objects in question remain under water and are difficult to access? The answer lies in bringing either the visitor physically to the site or the site virtually to the visitor: in other words, taking the museum out of the building.

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8 See also Manders 2015 (1) & Manders (2).


10 The Tudor ship, the Mary Rose, sank in the Solent near Portsmouth in 1545, was excavated in the early 1980s, and then removed from the seabed in 1982. Sixty million spectators worldwide watched this event on television. Since then, the vessel has moved to the Naval Dockyards in Portsmouth, where 4 million people have visited the ship’s hull (presently undergoing conservation) and its artefacts, which are on display in the adjoining museum. See http://www.maryrose.org (accessed 31-01-2017). The Swedish flagship Vasa sank near Stockholm on its maiden voyage in 1628 and was brought to the surface in 1961. In 1962, a temporary museum was constructed for the ship and its artefacts. A permanent museum was inaugurated in 1992. See http://www.vasamuseet.se (accessed 31-01-2017).


12 The NOB (Nederlandse Onderwatersport Bond) is the Netherlands’ largest sports diving community, with 20,000 members. It is estimated that there are approximately 1.2 million (+15 percent) sports divers active in the United States. See http://www.undercurrent.org (accessed 31-01-2017).
7.3 Bringing visitors to the site

The first thing that comes to mind when thinking about bringing visitors to a site is that this may involve diving – and indeed, a large part of the visiting public comes from the diving community. However, the amateur diving community is not merely a large group; it is also an important stakeholder in the management and protection of underwater cultural heritage. In many countries, they comprise the primary source for new discoveries and function as the ‘eyes and ears’ of professional archaeologists and policymakers in underwater cultural heritage. It is, therefore, important to enlist them as allies in site management; turning them from stakeholders into shareholders. In fact, in many countries, including the Netherlands, underwater archaeology began as a result of amateur divers’ interest in marine history. One such worldwide operational maritime archaeology community, comprising both amateur and professional archaeologists, is the Nautical Archaeological Society (NAS), but there are many other local, national and even international groups of amateur divers operating, such as Deguwa (Germany), and LWAOW and STIMON (both from the Netherlands) (Fig. 7.4). For example, in the last few decades, underwater parks, heritage trails, site and area specific activities, and underwater museums have been created.

Restrictions in access to underwater sites, as a result of either legal or physical protection, form a serious threat to the involvement of this group. Therefore, denying access to one site could be compensated by enhancing accessibility to other sites and areas. This notion is growing, as is the number of new initiatives to create greater access to underwater archaeological sites. For example, the last few decades, underwater parks, heritage trails, site and area specific activities, and underwater museums have been created.

An underwater park is an area with some sort of legal status and protection. This may be created (and is often the case) because of the outstanding natural values, but it may also include or even exclusively be established for, cultural heritage protection. Underwater parks and reserves have been in use for quite some time, with new additions being considered in many parts of the world. Examples involving cultural heritage values include the Baltic Blue Parks, Caesarea in Israel, Wardang Island in South Australia, the Florida Keys National Marine Sanctuary and Emerald Bay State Underwater Park, California, in the US. There has also been an increase in individual sites being opened to the public.

Underwater heritage trails are discovery routes encouraging the exploration of areas with outstanding heritage. The development of underwater heritage trails and the creation of access to individual sites is potentially a multi-million dollar business, particularly considering the number of active sports divers in the world and the impact that the protection of natural and cultural resources may have on national tourism. This has not yet been explored to its full extent.

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13 In 2015, the RCE initiated research on the activities, role and perceptions of sports divers and amateur archaeologists in relation to cultural heritage management. This resulted in a publication (Bouman 2015), a symposium (http://nl.magazine.maritiemprogramma.nl/eMagazine-MP05-NL/#!inzet-van-vrijwilligers-in-de-onderwaterarcheologiehttp://nl.magazine.maritiemprogramma.nl/eMagazine-MP05-NL/#!inzet-van-vrijwilligers-in-de-onderwaterarcheologie, accessed 31-01-2017), and initiatives such as the pilot for cooperation within the framework of the law (http://nl.magazine.maritiemprogramma.nl/eMagazine-MP05-NL/#!pilot-van-start-voor-behoud-archeologisch-erfgoed-texelse-zeebodem, accessed 31-01-2017).
14 For the NAS, see: https://www.nauticalarchaeologysociety.org/ (accessed 31-01-2017). DEGUWA stands for Deutsche Gesellschaft zur Förderung der Unterwasserarchäologie e.V. The two Dutch amateur archaeologist groups are Stichting Maritiem Onderzoek (STIMON) and Landelijke Werkgroep Archeologie Onderwater (LWAOW).
15 See, for example, the initiatives to develop an underwater park in the Oostvoornsemeer (see: http://www.cultureelerfgoed.nl/nieuwearcheologen-dijken-in-het-oostvoornse-meer, accessed 31-01-2017), and the immersion of VAL 7 at another location to be used as a diving spot for sports divers (http://miamsterdam.com/explore_locations/view/277 (accessed 16-12-2015). See also http://www.machuproject.eu/WIS-viewer.htm for more on the VAL 7 site (accessed 31-01-2017).
17 Individual sites made effectively accessible to the public as underwater museums include the eighteenth-century French flagship Oceán in Portugal, the eighteenth-century Swedish warship Kronprins Gustav Adolf in Finland and the Buhelung in China. See also http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/about-the-heritage/underwater-museums (accessed 31-01-2017). Some other sites that have been opened to the public are the Portuguese warship Santo Antonio (1697) in Fort Jesus, Kenya, Underwater Museum, the Blue Parks in the Baltic Sea, the Underwater Shipwreck Discovery Trail, developed by the Victoria Archaeological Survey in Australia and the Fathom Five National Marine Park in Canada.
18 A heritage trail is a defined route which points to significant heritage aspects that a community wishes to highlight and present to locals and visitors (http://www.heritage.tas.gov.au/media/pdf/trails.pdf. accessed 31-01-2017).
19 One initiative in the field of dive tourism in relation to cultural heritage is the seaway trail, which enables diving around the Great Lakes of the United States. See http://www.seawaytrail.com (accessed 31-01-2017).
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This enthusiasm was felt by a group of experienced divers from the Nautical Archaeological Society in the UK when, in 2007, they visited an in situ preserved wreck – the BZN 10 in the Wadden Sea.

See, for example, Koeveringe et al. 2011.

See, for example, the maritime trails on the Cayman Islands (Leshikar – Denton, 2006) or the maritime promotion of South Africa on the web (http://www.southafrica.net/za/hl/articles/entry/article-southafrica.net-shipwrecks-off-south-africas-coast, accessed 31-01-2017).

See Chapter 7.

The initiatives to visualize underwater areas, such as the development of the Historical Geomorphological Map Set for the Wadden Sea, may provide a good basis for associating individual sites with the larger geographical area and to visualize this for a larger stakeholder group. A trail can thus also be set up in a larger area. It may even comprise underwater and terrestrial sites. We might think of a trail of the Dutch Golden Era in the Wadden Sea, for example. The visibility is not exceptionally good in the Wadden Sea, but this can be compensated for well-preserved wrecks with an interesting story and all recognized stepping stones in this significant period of Dutch maritime history. The trail might focus on attracting experienced divers from across the world with an interest in maritime history. It could thus be marketed as a challenge. Out of the water, the experience could continue on land, with a maritime trail on the island of Texel (Fig. 7.5).

Underwater trails or site visits can be educational and perhaps they also should be. Visitors should have the feeling they have got something out of the experience: perhaps not by collecting the objects, but at least from hearing the stories. The desire for such experiences can be supported. Individual sites may function as specific windows to the past. Often underwater site visits are focused on the site itself and not the larger area or the moment in time it was active. This differs from heritage trails, with such maritime trails on shore often telling a larger story. The individual sites open to the public may not be those that are the most archaeologically valuable in the area, as these may be physically covered and closed to the public. Therefore, the publicly accessible sites may, by default, become the places about which stories are recounted, stories of particular ships within the wider context and the physically tangible evidence of the past. In other words, perhaps in some cases it may be more enjoyable and more of an experience to be able to touch the past than to only be able to look or read about it.

The initiatives to visualize underwater areas, such as the development of the Historical Geomorphological Map Set for the Wadden Sea, may provide a good basis for associating individual sites with the larger geographical area and to visualize this for a larger stakeholder group. A trail can thus also be set up in a larger area. It may even comprise underwater and terrestrial sites. We might think of a trail of the Dutch Golden Era in the Wadden Sea, for example. The visibility is not exceptionally good in the Wadden Sea, but this can be compensated for well-preserved wrecks with an interesting story and all recognized stepping stones in this significant period of Dutch maritime history. The trail might focus on attracting experienced divers from across the world with an interest in maritime history. It could thus be marketed as a challenge. Out of the water, the experience could continue on land, with a maritime trail on the island of Texel (Fig. 7.5).

See, for example, Koeveringe et al. 2011.
Diving is an experience; diving around a shipwreck still lying where the disaster happened is a multi-level experience. It is interesting to consider all the possibilities these educational trails can offer. With the development of new visual and aural techniques and aids, trails can be vividly brought to life. For example, diving-helmet mounted displays are now being developed with visual projections on the interior of the glass.\textsuperscript{24} The potential for underwater heritage is remarkable: imagine being able to witness historical reconstructions or the excavations virtually in progress while the actual shipwreck lies before you on the seabed.\textsuperscript{25} This may be especially important in areas with poorer visibility, such as the Western Wadden Sea. Tests with underwater Wi-Fi and internet\textsuperscript{26} are challenging us to explore even wilder dreams, such as diving with live feeds, putting your information on Facebook, provoking discussion while still on site, or asking others to identify objects or offer suggestions about what to do. A site plan and the position of the diver, even in bad visibility can also be obtained.\textsuperscript{27} Although fully functioning underwater internet is not yet available, new developments with iPads and mobile phones that can be taken underwater\textsuperscript{28} equipped with image recognition and augmented reality that are connected to beacons are already coming very close.\textsuperscript{29}

Until development of such multimedia techniques has advanced sufficiently for large-scale use, we will continue to make information for divers available on the regular internet and in books, and on information columns on the seabed, plastic signage panels or water-resistant booklets (Fig. 7.6).\textsuperscript{30} Non-divers can also participate by visiting shallow sites in clear water while snorkelling, or taking guided tours in glass-bottom boats.\textsuperscript{31} This, however, is not really an option in the Western Wadden Sea due to poor visibility and the depth of the wrecks. However, the public can still learn about underwater cultural heritage while sailing in the area or travelling near the coast, for example by using GPS route plans and mobile phone apps which can supply information on nearby shipwrecks or other underwater archaeological sites in the vicinity.\textsuperscript{32} This method of transmitting information is already in use for land sites and can easily be deployed for sites under water.\textsuperscript{33} As suggested above, maritime

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{fig7_6.jpg}
\caption{A water resistant site map to bring to the site of the wreck of the Kronprins Gustav Adolf (1788) in Finland. Site map, courtesy National Board of Antiquities, Finland. Photo: M. Manders.}
\end{figure}

\textsuperscript{24} This technique was first employed for fighter pilots. Projection inside dive helmets is used by the Dutch navy to project side scan sonar pictures (high-frequency sound wave pictures from the seabed) to help the diver find his or her way in low-to-zero visibility water. The same technology is also used in 3D video gaming with the use of glasses. See, for example, http://www.geek.com/chips/35-helmet-uses-retinal-projection-to-give-pilots-a-gods-eye-view-1616488/ (accessed 31-01-2017), and http://www.soundmetrics.com/Industries-Served/Military/Search-Recovery (accessed 31-01-2017).
\textsuperscript{25} This is currently being tested by the NHL University of Applied Sciences in Leeuwarden in cooperation with the RCE for an exhibition of the seventeenth-century shipwreck de Melkmeid in IJsland. A 3D image of the wreck underwater has been created, in which visitors may move around. In addition, augmented reality images of what it should look like may be laid over the 3D animation. The tests are still in their early stages.
\textsuperscript{29} See, for example, the signage being produced for the Gustav Adolf wreck in Finland.
\textsuperscript{30} An example of this can be seen on: http://www.visitgeorgianbay.com/lighthouse-marine.cfm?action=1&things_to_doid=3&category=6 (accessed 31-01-2017).
\textsuperscript{31} For the Western Wadden Sea, the basic work (data collection and writing of background information) for such applications has already been done. See, for example, Koeveerhinge et al. 2011.
\textsuperscript{32} GPS positioning for archaeological sites is available for cities such as Split and Nice (among many others). There is a GPS heritage trail in the Archaeology Park of Malange in Belgium. See also http://www.archeopass.be (accessed on 31-01-2017). Archaeological sites can already be marked on route with TomTom (https://mydrive.tomtom.com/en_gb/, accessed 31-01-2017), but may easily be added on water navigation maps, including some background information on the sites for visiting tourists, whether in a boat on the surface or under water.
trails can also be set out on land, overlooking the sea, with information about the wrecks on panels, maps or booklets.34

7.4 Bringing the site to the people

Traditionally, maritime heritage has been brought to the public through artefacts recovered from the seabed and displayed in museums. Ideally, these artefacts have been recovered by archaeologists, but many museums also have artefacts in their collections retrieved through commercial salvage, dredging or souvenir hunting.35 In these instances, the objects themselves have to tell their story out of context. Occasionally, an entire ship and its contents are displayed together, as is the case for the Vasa.36

In China, a further step has been taken, with an entire unexcavated ship brought into a museum setting to enable the public to experience the excitement of archaeological research and underwater excavation for themselves.37 The new Guangdong Maritime Silk Road Museum in Yangjiang, Guangdong Province — also called the Crystal Palace — has been constructed with an enormous basin, 64 metres long, 40 metres wide and 23 metres high, for the Nan Hai 1 wreck — a 30 metre long shipwreck from the Song Dynasty (960–1279) discovered in 1987. It was raised from the seabed in December 2007 to form the centrepiece of the new museum. It is expected that within 10 years up to 80,000 objects will be excavated from the wreck and presented in the museum.38

The growing importance of the non-diving public to underwater cultural heritage is underlined in Alexandria, Egypt, where a museum consisting of an area above water and another underwater area with a controlled environment and better visibility is planned to be constructed.39 Artefacts that have already been removed from the seabed for research will be placed in this area and thus ensure public access. In a sense, this could be regarded as the ‘Disneyfication’ of underwater cultural heritage, but it does at least enable the public to experience for themselves the mystery of the underwater environment while at the same time providing funds for the management of the site.40

In certain cases, however, sites lack artefacts or are inaccessible due to their environment. An excavation may not have taken place at the site and it may instead be covered for protection. How can the public interest be addressed in these instances? From the point of view of a traditional museum, this might seem difficult. Museums are used to amassing objects for the purposes of display. However, in the years to come, how many shipwrecks will be excavated and how many will be preserved in situ? Due to enormous pressure for access to the seabed for aggregate extraction and offshore construction work, some archaeological sites will have to be removed by excavation.41 When this occurs, according to the 2001 UNESCO Convention, the excavations will have to be performed according to rules of good practice.42 These guarantee the proper treatment of artefacts and the gathering of good-quality information, ready for museum display.43 It should also be remembered that many museums have already assembled considerable collections of archaeological material from underwater sites over extended periods of time.44

These artefacts may constitute a more than sufficient resource to form the basis of exhibitions and illustrate the stories that museums wish to recount. If not, there is also the possibility of borrowing artefacts from museums or central archaeological depots. These finds are often not owned by museums, but instead belong to the State, as is the case in the Netherlands.45 In some countries, the artefacts, data and documents from archaeological research in central archaeological depots are linked to government-run museum bodies that encourage display. Important, however, is that the single or small collections

34 See, for example, the publication 100 x Trevel Maritim (Koeveringe et al. 2011), which also includes an all-weather map with maritime sites on land as well as under water.
35 See, for example, the collection of Chinese porcelain from the Geldermalsen Wreck (1752) at the Groninger Museum (http://collectie.groningermuseum.nl/brief.aspx, accessed 31-01-2017).
36 See note 1021.
37 The wreck was raised in one block with its surrounding sediment www.whatsonxiamen.com/news/19118.html (accessed on 31-01-2017).
40 The same kind of idea has been implemented at the Guaraguao Reef Cannons Preserve in the Dominican Republic. For more information, see http://www.unesco.org/culture/en/underwater (accessed 31-01-2017).
43 Rule 24 of the Annex mentions the conservation of archaeological remains.
44 The Swedish Maritime Museum alone has collected 60,000 objects, ranging from complete ships (and shipwrecks) to small objects, in just over 100 years (http://www.sjohistoriska.se/en/Collections/Objects/, accessed 31-01-2017). Het Scheepvaartmuseum (Maritime Museum in Amsterdam) has approximately 300,000 objects, according to http://www.bankgiroloterij.nl/goede-doelen/het-scheepvaartmuseum.htm (accessed 31-01-2017) and the national maritime depot in Lelystad has 35,000 objects (https://www.flickr.com/photos/98015679@N04/sets/72157634579575313/, accessed 31-01-2017).
of objects are connected to a site or other salvaged objects, in order to create context and to form at least a virtual collection.

With new techniques and the urge to digitalize and present everything in ‘open source’, this is becoming a realistic option. Elaborating more on the reconnecting of information and objects from one site, new digital recording methods have great advantages. As an example, 3D photogrammetry has evolved into a great tool for archaeological and cultural heritage management research, but may also prove to be extremely useful in virtually reconnecting objects already removed from a site with each other and the site itself, and to targeting those who cannot gain access to the site (Fig. 7.7).47

Today, the development of interactive digital supports has opened a whole new range of possibilities for transmitting information to the public. Alongside traditional displays of artefacts, it is now possible to recreate the feel of specific environments, bringing objects and sites into the building. Holographic displays and 3D projections offer tantalizing impressions, even odours can be added, vividly recreating the atmosphere of specific sites (Fig. 7.8).49 The photographic aids to digitalize shipwrecks in 3D and subsequent printing of the site in 3D also offer new opportunities. Sites can now be recorded and printed in precise scale models, to be used for exhibition and educational purposes.48 The same can be done for individual objects.51 Some sites have a live webcam connection to a museum or a website. Developments are rapidly taking place in this respect as well.52

The advent of the World Wide Web has introduced many new ways of raising awareness. Beyond the museum building, the web has become one of the information exchange forums most frequently used by scientists and others related to the field of underwater archaeology. Crowdfunding platforms even open up possibilities to become more intensely involved in archaeological projects, even professional ones, through the financial commitment. The growing number of links and websites, however, often remain inaccessible to the general public. The information exchanged is often not traceable and, if so, frequently presented in a highly academic way. Sites that do consist of approachable information do not reach a broader audience, due to search
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For example, PPC (Pay Per Click) Search engines such as Miva (http://www.miva.com, accessed 31-01-2017).

Two examples are archeologie.startpagina.nl (the Netherlands) and archeologie.start.be/(Belgium). A similar initiative is in the making in the Netherlands for maritime organizations involved in history and archaeology, including museums, in the maritime platform.

Manders 2015 (1).

See, for example, the Maritime Silk Road (http://www.chinaheritagequarterly.org/articles.php?searchterm=001_maritimesilk.inc&issue=001, accessed 31-01-2017).

With average visitor numbers amounting to between a few hundred and a couple of thousand, it is difficult for most of the potentially interesting websites, Facebook pages and digital underwater museums to reach and address new visitors in large numbers. This situation can be reversed through the contracting of specialized companies, but funding is not always available. One possible way of breaking this vicious circle is for the organizations involved to join initiatives on centralized archaeological pages. Another interesting possibility that is worth exploring concerns linking up with larger, commercial internet sites that can sponsor site exposure and thereby increase traffic.

The information exchanged need not only come from excavated sites. Basic information gained through inventories and non-intrusive significance assessments can be of great use in creating presentations for the wider public. Connecting the information about different sites with information about the area they are in, the history of the place and general historical facts will put the individual sites in perspective and also add to the tangibility of our common past and the creation of identity. This connection of underwater sites (including the individual objects) can be limited to regional areas such as the Burgzand or even the Western Wadden Sea, but also may extend across borders, exploring the relationship between sites, the environment, trading routes and markets.

Fig. 7.8 A thirteenth–century grenade in a display case with various animated images projected on the glass screen. Kyushu National Museum, Japan. Photo: M. Manders.
7.5 Conclusion

Although in situ preservation of underwater archaeological sites is considered to be the first option for many widely accepted reasons, it may create difficulties in raising awareness of the existence and richness of underwater cultural heritage. However, the difficulties it poses to traditional methods of exhibition and communication also challenge us to find new innovative ways forward. Museums housed inside buildings must review the stories they want to tell. They should determine whether these stories can be told with existing collections of artefacts. They need to invest in new ways and techniques to provide new and varied experiences; for example, in possible links from the museum building to sites on the seabed (Fig. 7.9).

Museums need not be housed in buildings. In some cases, sites themselves have become underwater museums (Fig. 7.10). Although often less accessible than a museum building, these are highly successful in addressing one major stakeholder in the protection of underwater cultural heritage: the sports diver. With the introduction of new visualization techniques, the challenge is to deploy these in the underwater cultural heritage field, both for research purposes and for the benefit of the general public.

Reaching large numbers of people previously not involved and increasing general awareness remains a challenge. This is not due to the subject, but is largely a problem of resources and utilizing the right channels of information. With the ratification of the UNESCO Convention on the Protection of the Underwater Cultural Heritage by the Netherlands soon to occur, and an increased interest in the ratification of the Faro Convention as well, this issue needs to be made a priority to ensure that awareness of the richness of our underwater cultural resource continues to grow. It is important to understand, however, that awareness and acceptance of the in situ policy needs to be created not only through a top-down or deductive approach, but also from the bottom up, or through an inductive approach, which not only addresses other stakeholders but works with them to establish cooperation and encourage our joint responsibility.²⁰

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²⁰ Manders & Underwood 2012.